

Listing of Claims

The following listing of claims will replace all prior versions, and listings, of claims in the subject application:

1. (previously presented) An image forming apparatus comprising:

a conveyance belt that conveys a recording medium by attracting the recording medium by an electrostatic force generated by positive and negative electric charges applied thereto;

a charger that applies the positive and negative electric charges alternately to said conveyance belt;

a recording head that discharges droplets of a recording liquid toward the recording medium being conveyed by said conveyance belt; and

a control part configured to adjust an amount of electric charges induced on a surface of the recording medium by the positive and negative electric charges applied to said conveyance belt,

wherein said control part is configured to neutralize an amount of electric charges on the surface of the recording medium by controlling the charger, and

wherein said control part adjusts the amount of the electric charges on the surface of the recording medium, which has been conveyed to a recording position where the droplets of the recording liquid are discharged from said recording head toward the recording medium, in accordance with a resistance value of the recording medium, to cause the electric charges on the surface of the recording medium to neutralize.

2. (previously presented) The image forming apparatus as claimed in claim 1, further

comprising:

a surface resistance measurement part configured to detect a surface resistance value of the recording medium;

wherein said control part adjusts the amount of the electric charges on the surface of the recording medium in accordance with the surface resistance detected by said surface resistance measurement part.

3. (previously presented) The image forming apparatus as claimed in claim 1, wherein said control part adjusts the amount of the electric charges on the surface of the recording medium in accordance with a result of detection of a volume resistance of the recording medium.

4. (previously presented) The image forming apparatus as claimed in claim 1, wherein said control part adjusts the amount of the electric charges on the surface of the recording medium in accordance with a result of detection of environment temperature and humidity.

5. (previously presented) The image forming apparatus as claimed in claim 1, wherein said control part adjusts the amount of the electric charges on the surface of the recording medium in accordance with externally given information regarding the resistance value of the recording medium.

6. (previously presented) The image forming apparatus as claimed in claim 1, wherein said control part adjusts the amount of the electric charges on the surface of the recording medium by controlling a charge period length of positive and negative charges applied by said

charger to said conveyance belt.

7. (previously presented) The image forming apparatus as claimed in claim 1, wherein said control part adjusts the amount of the electric charges on the surface of the recording medium by controlling an alternating voltage applied to said charger to apply positive and negative charges to said conveyance belt.

8. (previously presented) The image forming apparatus as claimed in claim 1, wherein said control part adjusts the amount of the electric charges on the surface of the recording medium by controlling a timing of applying electric charges onto said conveyance belt so as to switch existence/nonexistence of charges on the surface of the recording medium.

9. (previously presented) The image forming apparatus as claimed in claim 1, wherein said control part adjusts the amount of the electric charges on the surface of the recording medium by controlling at least one of a conveyance speed and a stop time of said conveyance belt so as to change a time period from a time when the charges are applied to said conveyance belt until a time when the charges on said conveyance belt reach the recording position.

Claims 10–38 (canceled).

39. (new) The image forming apparatus of claim 1, wherein
said control part adjusts the amount of the electric charges on the surface of the recording medium so that a surface potential at the recording position is equal to or smaller than 500 Vp-p.

40. (new) The image forming apparatus of claim 1, wherein
said control part adjusts the amount of the electric charges on the surface of the recording medium so that a volume potential at the recording position is equal to or smaller than 500 Vp-p.

41. (new) An image forming apparatus comprising:
a conveyance belt;
a charger configured to apply positive and negative electric charges alternately to said conveyance belt;

a control part configured to adjust an amount of electric charges induced on a surface of a recording medium by the positive and negative electric charges applied to said conveyance belt;
and

a surface resistance measurement part configured to detect a surface resistance value of the recording medium;

wherein said control part is configured to neutralize an amount of electric charges on the surface of the recording medium by controlling the charger, and

wherein said control part adjusts the amount of the electric charges on the surface of the recording medium in accordance with a resistance value of the recording medium, and adjusts the amount of the electric charges on the surface of the recording medium in accordance with the surface resistance value detected by said surface resistance measurement part.

42. (new) The image forming apparatus of claim 41, wherein
said control part adjusts the amount of the electric charges on the surface of the recording

medium so that a surface potential at the recording position is equal to or smaller than 500 Vp-p.

43. (new) The image forming apparatus of claim 41, wherein
said control part adjusts the amount of the electric charges on the surface of the recording medium so that a volume potential at the recording position is equal to or smaller than 500 Vp-p.

44. (new) A method for conveying a recording medium comprising:
adjusting an amount of positive and negative electric charges to be applied to a conveyance belt in accordance with a resistance of a recording medium;
applying the positive and negative electric charges alternately to the conveyance belt with a charger;
controlling the charger to neutralize an amount of electric charges on the surface of the recording medium;
feeding the recording medium towards the conveyance belt so that the electric charges attract the recording medium to the conveyance belt; and
rotating the conveyance belt.

45. (new) The method of claim 44, wherein
the amount of positive and negative electric charges is adjusted in accordance with a surface resistance detected by a surface resistance measurement part.

46. (new) The method of claim 44, wherein
the amount of positive and negative charges is adjusted so that a surface potential of the

recording medium at a recording position is equal to or smaller than 500 Vp-p.

47. (new) The method of claim 44, wherein

the amount of positive and negative charges is adjusted so that a volume potential of the recording medium at a recording position is equal to or smaller than 500 Vp-p.